



Name: _____
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 Geometry, Period _____
 Due Date: _____

HW 75_Factoring Negative quadratics

**Geometry
Homework**

Form A

Solve each equation by factoring.

1) $p^2 + 8p + 7 = 0$

$$\begin{array}{|c|c|} \hline p & +7 \\ \hline p & p^2 \\ \hline + & 1p \\ \hline 1 & +7 \\ \hline \end{array}$$

$$(p+7)(p+1)=0$$

$$p+7=0 \quad p+1=0$$

$$p=-7 \quad p=-1$$

$$p = \{-7, -1\}$$

2) $p^2 + 14p + 48 = 0$

$$\begin{array}{|c|c|} \hline p & \\ \hline p & p^2 \\ \hline & +48 \\ \hline \end{array}$$

$$1, 48 \quad 4, 12$$

$$2, 24 \quad 6, 8$$

$$3, 16$$

3) $x^2 + 10x + 25 = 0$

4) $a^2 + 7a + 6 = 0$

5) $v^2 + 11v + 24 = 0$

6) $p^2 + 14p + 48 = 0$

Factor each completely (-b term; +c term)

7) $x^2 - 8x + 15$

$$\begin{array}{|c|c|} \hline x & -5 \\ \hline x & x^2 \\ \hline -3 & -3x \\ \hline +15 & \\ \hline \end{array}$$

$$(x-5)(x-3)$$

8) $b^2 - 7b + 6$

$$\begin{array}{|c|c|} \hline b & -7b \\ \hline b & b^2 \\ \hline +6 & \\ \hline \end{array}$$

$$1, 6 \quad 2, 3$$

9) $r^2 - 11r + 18$

10) $x^2 - 11x + 18$

11) $n^2 - 9n + 8$

12) $p^2 - 7p + 10$

Factor each completely. (+b term, -c term)

13) $x^2 + 3x - 28$

Handwritten work for 13):

x^2	$+7x$	$+3x$
$-4x$	-28	

Factors: $(x+7)(x-4)$

14) $r^2 + r - 90$

Handwritten work for 14):

r^2	$+1r$
-90	

Factors: $(r+10)(r-9)$

15) $a^2 + 7a - 18$

16) $b^2 + 3b - 10$

17) $n^2 + 9n - 10$

18) $n^2 + 8n - 9$

19) Write an equation of the line with the given slope and y-intercept in SLOPE-INT form.

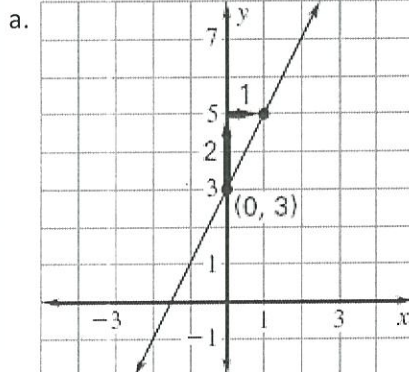
a. slope: 3; y-intercept: 8

b. slope: 11; y-intercept: 2

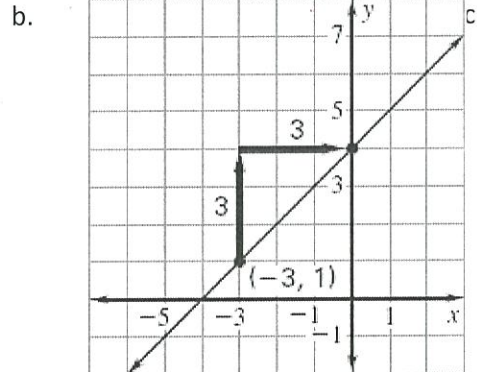
c. slope: -4; y-intercept: 5

Handwritten: $y = mx + b$

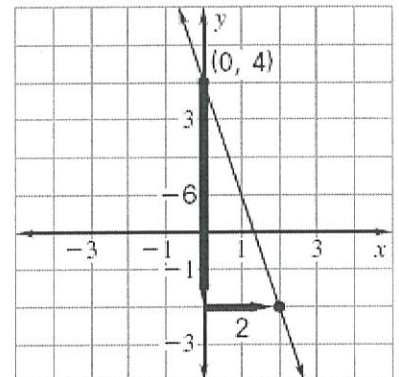
20) Write an equation of the line shown.



Y-intercept: 3
Slope: _____
Equation: _____



Y-intercept: _____
Slope: _____
Equation: _____



Y-intercept: _____
Slope: _____
Equation: _____